UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,004	09/16/2003	David H. Burkett	ACS 62622 (3714P)	3904

24201 7590 01/29/2009

FULWIDER PATTON LLP
HOWARD HUGHES CENTER
6060 CENTER DRIVE, TENTH FLOOR
LOS ANGELES, CA 90045

EXAMINER	
WACHTEL, EMILY L	

ART UNIT	PAPER NUMBER
3767	

MAIL DATE	DELIVERY MODE
01/29/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/664,004	BURKETT ET AL.	
	Examiner	Art Unit	
	EMILY WACHTEL	3767	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *4,5,8,9 and 18-30* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 6, 7, 10-17, and 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 24, 2008 has been entered.

Claim Objections

2. Claims 1 is objected to because of the following informalities: claim 1 recites 'a polymer coating....adhering to at least a portion of the wire core and having a surface contour as part of the wire core itself...' this reads as though the polymer coating has a surface contour which is part of the wire core itself. This is unclear, the Examiner believes that the claim is intended to be interpreted to mean that the surface contour is on the wire core itself and the polymer coating is adhering to these contours. Appropriate correction is required.

Claim Rejections - 35 USC § 102/Claim Rejections - 35 USC § 103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 3, 6, 10, and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Prather (U.S. Patent 5,404,887).

With regard to claim 1, Prather teaches an intraluminal guide wire (Fig. 1 guide 10), comprising; an elongated core (Fig. 1 core 12) having a proximal core section (Fig. 1 generally indicated at R2) and a distal core section (Fig. 1 section generally indicated at T3) having a distal end (Fig. 1 distal end at 13); wherein at least a section of the elongated core includes at least one of randomized and non-randomized tactile surface contours (Fig. 14 surface contours 78, Col. 2 lines 17-27, Col. 8 lines 47-49); an uninterrupted polymer coating with a generally consistent outside diameter adhering to at least a portion of the elongated core and having a surface contour as a part of the wire core itself (Fig. 14, the contours are shown to be part of the core itself further evidenced by all parts having the same and continued cross hatching) that follows the at least one of randomized and non-randomized tactile surface contours in the elongated core (Fig.1 shows a generally constant outer diameter of the core, Col. 7 lines 46-54 discloses a polymer coating which would follow the contours of the core and would have a generally constant outer diameter as it followed the generally consistent outer diameter of the core); and a flexible tubular member disposed over the distal core section (Fig. 1 flexible member 14).

Alternatively, Prather teaches an intraluminal guide wire (Fig. 1 guide 10), comprising; an elongated core (Fig. 1 core 12) having a proximal core section (Fig. 1 generally indicated at R2) and a distal core section (Fig. 1 section generally indicated at T3) having a distal end (Fig. 1 distal end at 13); wherein at least a section of the elongated core includes at least one of

randomized and non-randomized tactile surface contours (Fig. 14 surface contours 78, Col. 2 lines 17-27, Col. 8 lines 47-49); an uninterrupted polymer coating with a generally consistent outside diameter adhering to at least a portion of the elongated core and having a surface contour that follows the at least one of randomized and non-randomized tactile surface contours in the elongated core (Fig.1 shows a generally constant outer diameter of the core, Col. 7 lines 46-54 discloses a polymer coating which would follow the contours of the core and would have a generally constant outer diameter as it followed the generally consistent outer diameter of the core); and a flexible tubular member disposed over the distal core section (Fig. 1 flexible member 14). Prather does not explicitly teach that the surface contours are a part of the wire core itself. However, Prather shows in Figure 14 the contours to be a part of the core itself. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to make the surface contours on the wire core itself because Prather illustrates such a scenario and further, further, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrally form the wire core and the contours since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. (*Howard v. Detroit Stove Works,* 150 U.S. 164 (1893). Additionally, this would simplify the manufacturing process.

With regard to claim 3, the tactile surface contours include a bump (Fig. 14 contour 78, Fig. 3 contour 24).

With regard to claim 6, the tactile surface contours include a rib (Fig. 14 contour 78, Fig. 3 contour 24).

With regard to claim 10, the tactile surface contours include ridges and dips (Fig. 14 contour 78, Fig. 3 contour 24).

With regard to claim 15, the polymer coating is Teflon, a fluoropolymer (Col. 7 line 59).

6. Claims 2, 7, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prather (U.S. Patent 5,404,887) as applied to claim 1 above, and further in view of McMahon (U.S. Patent 6,296,616).

With regard to claim 2, Prather teaches an intraluminal guide wire substantially as claimed and further shows that the surface-to-peak amplitude of the contours would be .002 inches (Col. 5 lines 31-33 - the difference between the maximum outer diameter and minimum outer diameter yields the height of the surface contour), but Prather does not teach a range of about .0002 to .002 inches. However, McMahon teaches a guide wire with a plurality of contact and non-contact regions (Fig. 1 guide wire 10). These peaks have a height of about.01-.1mm which is approximately .0003 - .003in. (Col. 2 lines 59-61) and are used to reduce resistance (Col. 3 lines 1-14). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to create surface contours, in the guide wire of Prather, with a surface-to-peak amplitude of about .0002 to .002 inches as McMahon substantially discloses such a range to reduce the surface contact between the guide wire and the lumen through which it passes and is effective in reducing resistance. Further, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claim 7, Prather teaches an intraluminal guide wire substantially as claimed and further shows eight protrusions on a guide wire (Fig. Fig. 14 contour 78) and based on a guide diameter of .36 mm this ultimately places the protrusion about .015 cm apart. Prather does not disclose the spacing to range between .05 cm to 2 cm. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to vary the number of contours and thus the spacing of the contours to place it within a range of .05 cm to 2 cm because it would serve as a means to adjust the surface contact area and thus the friction to achieve a desired amount of frictional resistance. Further, McMahon teaches a guide wire with a plurality of contact and non-contact regions (Fig. 1 guide wire 10). The peaks of the contact regions have a spacing of .005 cm to .5 cm (Col. 2 lines 57-58) and are used to reduce resistance (Col. 3 lines 1-14). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to create surface contours, in the guide wire of Prather, with a spacing of about .05 to 2 cm as McMahon discloses an overlapping range to reduce the surface contact between the guide wire and the lumen through which it passes and is effective in reducing resistance. Further, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claim 16, Prather teaches an intraluminal guide wire (Fig. 1 guide 10), comprising; an elongated core (Fig. 1 core 12) having a proximal core section (Fig. 1 generally indicated at R2) and a distal core section (Fig. 1 section generally indicated at T3) having a distal end (Fig. 1 distal end at 13); wherein an exterior surface of the distal core section includes randomized tactile surface contours (The core can have the contours directly on it's surface as in

Fig. 14 surface contours 78, or on sleeve which is included as a part of the core as in Fig 3 contours 24, Col. 2 lines 17-27, Col. 8 lines 47-49); a polymer coating adhering to at least a portion of the distal core section with a coating profile not following a tapered profile of the elongated core (Fig. 1 the elongated core 12 has an inner tapered profile and an outer sleeve 18 with contours 24, Fig. 3, thereby, the coating does not follow the tapered profile), the polymer coating having randomized tactile surface contours following the randomized surface contours of the exterior surface of the distal core section (Fig.1 the polymer coating follows the exterior surface contours of the sleeve, Col. 7 lines 46-54 discloses a polymer coating which would follow the contours of the core); and a flexible tubular member disposed over the distal core section (Fig. 1 flexible member 14). Prather shows in Fig. 14 that the surface contours are part of the core itself (further evidenced by all parts having the same and continued cross hatching). Alternatively, in the event Prather does not explicitly disclose that the surface contours are a part of the wire core itself. However, Prather shows in Figure 14 the contours to be a part of the core itself. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to make the surface contours on the wire core itself because Prather illustrates such a scenario and further, further, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrally form the wire core and the contours since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. (*Howard v. Detroit Stove Works,* 150 U.S. 164 (1893). Additionally, this would simplify the manufacturing process.

Prather does not disclose the polymer coating to have a generally non-uniform thickness. However, McMahon discloses a guide wire with a coating of non-uniform thickness following

the tapered profile of the core to create a constant outer diameter (Fig. 1 ref. numbers 11, 13, 15 - sheath 15 is taken to be equivalent to a coating as Meriam-Webster dictionary defines a coat as 'a layer of one substance covering another' which is embodied by the sheath, and it does not follow the tapered profile of the elongated core, Col. 2 lines 45-46 - sheath is polymeric material). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize a polymer coating with a non-uniform thickness in the guide wire of Prather because McMahon teaches this to create a constant outer diameter and in the case in Prather when the surface contours are directly on the tapered surface it would still allow for a constant outer diameter as desired when using the outer sleeve.

With regard to claim 17, the tactile surface contours include a rib (Fig. 14 contour 78, Fig. 3 contour 24).

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prather (U.S. Patent 5,404,887) as applied to claim 1 above, and further in view of Mageoh (U.S. Patent 3,731,671).

With regard to claim 11, Prather discloses an intraluminal guide wire substantially as claimed but does not show the surface contour to include a circumferential groove. However, Mageoh teaches a guide wire which will only contact the lumen it is being passed through at spaced apart points to reduce friction (Col. 1 lines 47-52, Fig. 3). The spaced apart points in the guide wire create circumferential grooves. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to create surface contours in Prather that would yield a circumferential groove because Mageoh has shown such a contour to

be an art effective means for reducing the surface contact between the guide wire and a lumen to reduce friction and such configurations would be art recognized equivalents.

8. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prather (U.S. Patent 5,404,887) as applied to claim 1 above, and further in view of Richardson et al. (WO 01/36034).

With regards to claims 12 and 13, Prather teaches a coated guide wire substantially as claimed but does not disclose the flexible tubular member disposed over the polymer coating, as in claim 12, or the coating disposed over the flexible tubular member as in claim 13. However, Richardson et al. discloses a coated guide wire with a flexible tubular member (Fig. 1 core member 11, proximal section 12, distal section 13, flexible member 14, coating 19). Richardson et al. teaches the coating can be applied anywhere along the core, thus, the flexible guide member would be over the coating (Pg. 20 lines 3-6) and additionally the coating can be applied over the flexible guide member, thus, the coating is disposed over the flexible guide member (Pg. 20 lines 3-6). This provides a lubricious coating to reduce friction. It would have been obvious to a person of ordinary skill in the art at the time the invention as made to dispose the flexible guide over the polymer coating, or the coating over the flexible guide in the device of Prather because Richardson et al. teaches such coatings to be lubricious and applied in any configuration to a guide wire and further it would have been obvious to a person of ordinary skill in the art at the time the invention was made to vary the placement of the coatings in order to achieve a desired amount of frictional resistance.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prather (U.S. Patent 5,404,887) as applied to claim 1 above, and further in view of Murayama et al. (US 2004/0039309).

With regard to claim 14, Prather discloses an intraluminal guide wire substantially as claimed but does not disclose the proximal core section to include high strength steel and the distal core section to include nickel-titanium alloy. However, Murayama et al. teaches a guide wire with a distal and proximal portion joined by welding (Pg. 1 [0009]). The two sections are made from different alloys (Pg. 4 [0070]), the distal section (Fig. 1 section 2) is made from a Nickel-Titanium alloy (Pg. 4 [0073]) and the proximal section (Fig. 1 section 3) is made from a stainless steel (Pg. 4 [0071]). This causes the distal portion to have high flexibility and the proximal portion to have a high rigidity and, therefore, the guide wire has a high flexibility and high torque transmission which enhances the operationability of the wire (Pg. 4 [0070]). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to create the guide wire in Prather so the proximal core section to include high strength steel and the distal core section to include nickel-titanium alloy because Murayama et al. teaches that this gives the guide wire a high flexibility and high torque transmission which enhances the operationability of the wire.

10. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prather (U.S. Patent 5,404,887) in view of McMahon (U.S. Patent 6,296,616), Richardson et al. (WO 01/36034), and Murayama et al. (US 2004/0039309).

With regard to claim 31, Prather teaches an intraluminal guide wire (Fig. 1 guide 10), comprising; an elongated core (Fig. 1 core 12) having a proximal core section (Fig. 1 generally indicated at R2) and a distal core section (Fig. 1 section generally indicated at T3) having a distal end (Fig. 1 distal end at 13); wherein an exterior surface of the distal core section includes randomized tactile surface contours (The core can have the contours directly on it's surface as in Fig. 14 surface contours 78, or on sleeve which is included as a part of the core as in Fig 3 contours 24, Col. 2 lines 17-27, Col. 8 lines 47-49); a polymer coating adhering to at least a portion of the distal core section with a coating profile not following a tapered profile of the elongated core (Fig. 1 the elongated core 12 has an inner tapered profile and an outer sleeve 18 with contours 24, Fig. 3, thereby, the coating does not follow the tapered profile), the polymer coating having randomized tactile surface contours following the randomized surface contours of the exterior surface of the distal core section (Fig.1 the polymer coating follows the exterior surface contours of the sleeve, Col. 7 lines 46-54 discloses a polymer coating which would follow the contours of the core); and a flexible tubular member disposed over the distal core section (Fig. 1 flexible member 14). Prather shows in Fig. 14 that the surface contours are part of the core itself (further evidenced by all parts having the same and continued cross hatching). Alternatively, in the event Prather does not explicitly disclose that the surface contours are a part of the wire core itself. However, Prather shows in Figure 14 the contours to be a part of the core itself. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to make the surface contours on the wire core itself because Prather illustrates such a scenario and further, further, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrally form the wire core and the contours since it has

been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. (*Howard v. Detroit Stove Works,* 150 U.S. 164 (1893). Additionally, this would simplify the manufacturing process.

Prather does not disclose the polymer coating to have a generally non-uniform thickness. However, McMahon discloses a guide wire with a coating of non-uniform thickness following the tapered profile of the core to create a constant outer diameter (Fig. 1 ref. numbers 11, 13, 15 - sheath 15 is taken to be equivalent to a coating as Meriam-Webster dictionary defines a coat as 'a layer of one substance covering another' which is embodied by the sheath, and it does not follow the tapered profile of the elongated core, Col. 2 lines 45-46 - sheath is polymeric material). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize a polymer coating with a non-uniform thickness in the guide wire of Prather because McMahon teaches this to create a constant outer diameter and in the case in Prather when the surface contours are directly on the tapered surface it would still allow for a constant outer diameter as desired when using the outer sleeve. Prather teaches an intraluminal guide wire substantially as claimed and further shows that the surface-to-peak amplitude of the contours would be .002 inches (Col. 5 lines 31-33 - the difference between the maximum outer diameter and minimum outer diameter yields the height of the surface contour), but Prather does not teach a range of about .0002 to .002 inches. However, McMahon teaches a guide wire with a plurality of contact and non-contact regions (Fig. 1 guide wire 10). These peaks have a height of about.01-.1mm which is approximately .0003 - .003in. (Col. 2 lines 59-61) and are used to reduce resistance (Col. 3 lines 1-14). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to create surface contours, in the guide wire of Prather,

with a surface-to-peak amplitude of about .0002 to .002 inches as McMahon substantially discloses such a range to reduce the surface contact between the guide wire and the lumen through which it passes and is effective in reducing resistance. Further, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Prather does not disclose the flexible tubular member disposed over the polymer coating. However, Richardson et al. discloses a coated guide wire with a flexible tubular member (Fig. 1 core member 11, proximal section 12, distal section 13, flexible member 14, coating 19). Richardson et al. teaches the coating can be applied anywhere along the core, thus, the flexible guide member would be over the coating (Pg. 20 lines 3-6) and additionally the coating can be applied over the flexible guide member, thus, the coating is disposed over the flexible guide member (Pg. 20 lines 3-6). This provides a lubricious coating to reduce friction. It would have been obvious to a person of ordinary skill in the art at the time the invention as made to dispose the flexible guide over the polymer coating in the device of Prather because Richardson et al. teaches such coatings to be lubricious and applied in any configuration to a guide wire and further it would have been obvious to a person of ordinary skill in the art at the time the invention was made to vary the placement of the coatings in order to achieve a desired amount of frictional resistance. Prather does not disclose the proximal core section to include high strength steel and the distal core section to include nickel-titanium alloy. However, Murayama et al. teaches a guide wire with a distal and proximal portion joined by welding (Pg. 1 [0009]). The two sections are made from different alloys (Pg. 4 [0070]), the distal section (Fig. 1 section 2) is made from a Nickel-Titanium alloy (Pg. 4 [0073]) and the proximal section (Fig. 1 section 3) is made from a stainless

steel (Pg. 4 [0071]). This causes the distal portion to have high flexibility and the proximal portion to have a high rigidity and, therefore, the guide wire has a high flexibility and high torque transmission which enhances the operationability of the wire (Pg. 4 [0070]). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to create the guide wire in Prather so the proximal core section to include high strength steel and the distal core section to include nickel-titanium alloy because Murayama et al. teaches that this gives the guide wire a high flexibility and high torque transmission which enhances the operationability of the wire. Prather teaches the polymer coating is Teflon, a fluoropolymer (Col. 7 line 59).

Response to Amendment

11. The amendments to the claims have been entered. The previous double patenting rejection has been withdrawn due to the newly entered amendments.

Response to Arguments

12. Applicant's arguments filed November 24, 2008 have been fully considered but they are not persuasive. The Examiner still maintains the position that Fig. 14 and Col. 8 lines 45-50 teach contours directly on the wire core. This is further evidenced by the fact that both members 74 and 78 have the same cross-hatching (see CFR 1.84(h)(3)). The Examiner has made an alternative obviousness rejection to this point in order to encompass various interpretations of the teaching found in the Prather reference.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMILY WACHTEL whose telephone number is (571) 270-3648.

The examiner can normally be reached on Monday through Thursday 7:30 AM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Emily Wachtel/
Examiner, Art Unit 3767
/Kevin C. Sirmons/
Supervisory Patent Examiner, Art Unit 3767